1 Longest Nice Substring

```cpp
class Solution {
 public:
  string longestNiceSubstring(string s) {
    if (s.length() < 2)
      return "";
    unordered_set<char> seen{s.begin(), s.end()};
    for (int i = 0; i < s.size(); ++i)
      if (!seen.contains(toggleCase(s[i]))) {
        const string prefix = longestNiceSubstring(s.substr(0, i));
        const string suffix = longestNiceSubstring(s.substr(i + 1));
        return prefix.length() >= suffix.length() ? prefix : suffix;
      }

    return s;
  }
 private:
  char toggleCase(char c) {
    return islower(c) ? toupper(c) : tolower(c);
  }
};
```

≡ Problem List < > ⤫   ▶ Run ⬆ Submit ⏱ ⬚   ⬚⬚ ⚙ 🔥2 🏆 Premium

📄 Description | 🕘 Accepted ✕ | Editorial | 📊 Solutions | 🕘 Submissions   [ ] <   </> Code

← All Submissions   ⊘   C++ ˅ 🔒 Auto   ≡ 🔖 {} ↺ ⤢

Accepted 73 / 73 testcases passed   6   unordered_set<char> seen{s.begin(), s.end()};
👤 Aditee_Agrawal submitted at Feb 20, 2025 19:00   ✍ Solution   7   for (int i = 0; i < s.size(); ++i)
                                                                        8   if (!seen.contains(toggleCase(s[i]))) {
                                                                        9   const string prefix = longestNiceSubstring(s.substr(0, i));
⏱ Runtime   ⓘ   ⬚ Memory   10   const string suffix = longestNiceSubstring(s.substr(i + 1));
                                                                       11   return prefix.length() >= suffix.length() ? prefix : suffix;
7 ms | Beats 65.20% 😊   14.09 MB Beats 69.79% 😊   12   }
✨ Analyze Complexity   13
                                                                       14   return s;
60%   15 }
            😊   16
40%   17 private:
                                                                       18   char toggleCase(char c) {
20%
                                                                       Saved   Ln 13, Col 1
0%
     2ms   48ms   94ms   140ms   186ms   232ms   279ms   ☑ Testcase >_ Test Result

     2ms   48ms   94ms   140ms   186ms   232ms   279ms   Accepted Runtime: 0 ms

Code | C++   • Case 1   • Case 2   • Case 3

class Solution {   Input
public:
  string longestNiceSubstring(string s) {   s =
    if (s.length() < 2)   "YazaAay"
      return "";
    unordered_set<char> seen{s.begin(), s.end()};   Output
    for (int i = 0; i < s.size(); ++i)
      if (!seen.contains(toggleCase(s[i]))) {   "aAa"
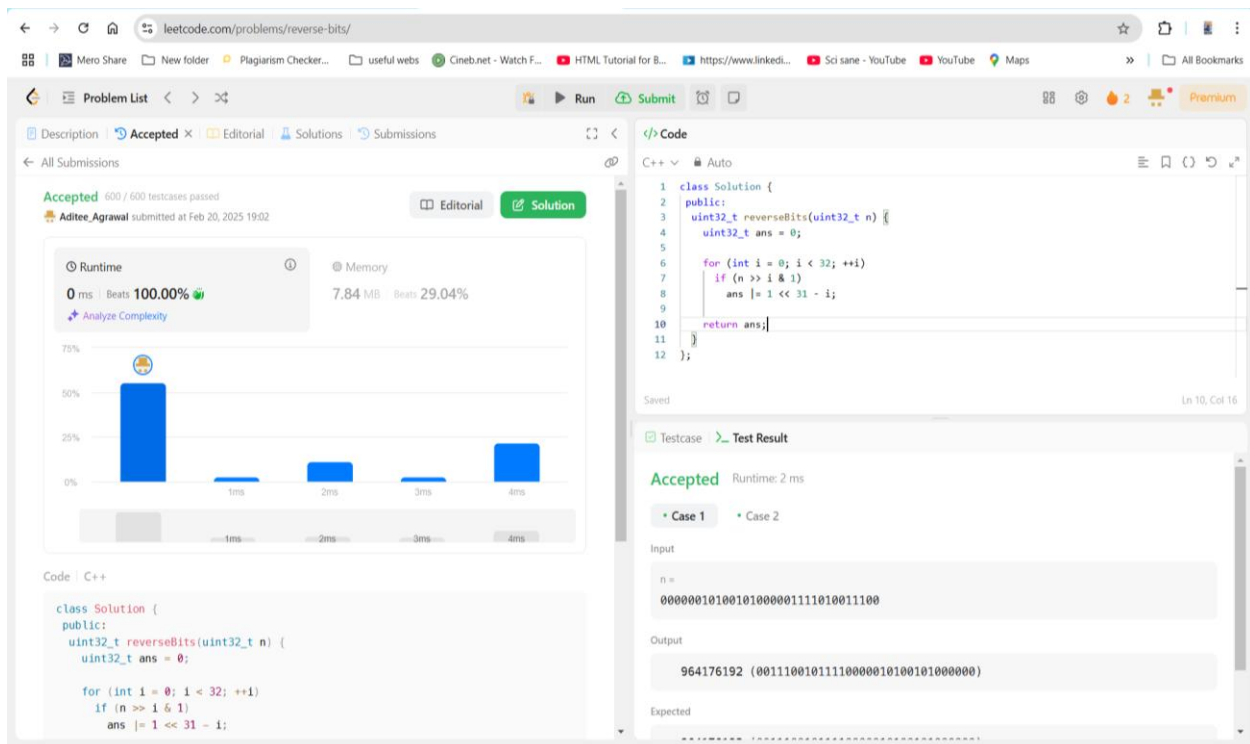
                                                                       Expected

2. Reverse bits

```cpp
class Solution {

 public:

  uint32_t reverseBits(uint32_t n) {

   uint32_t ans = 0;

   for (int i = 0; i < 32; ++i)

    if (n >> i & 1)

     ans |= 1 << 31 - i;

   return ans;

  }

};
```
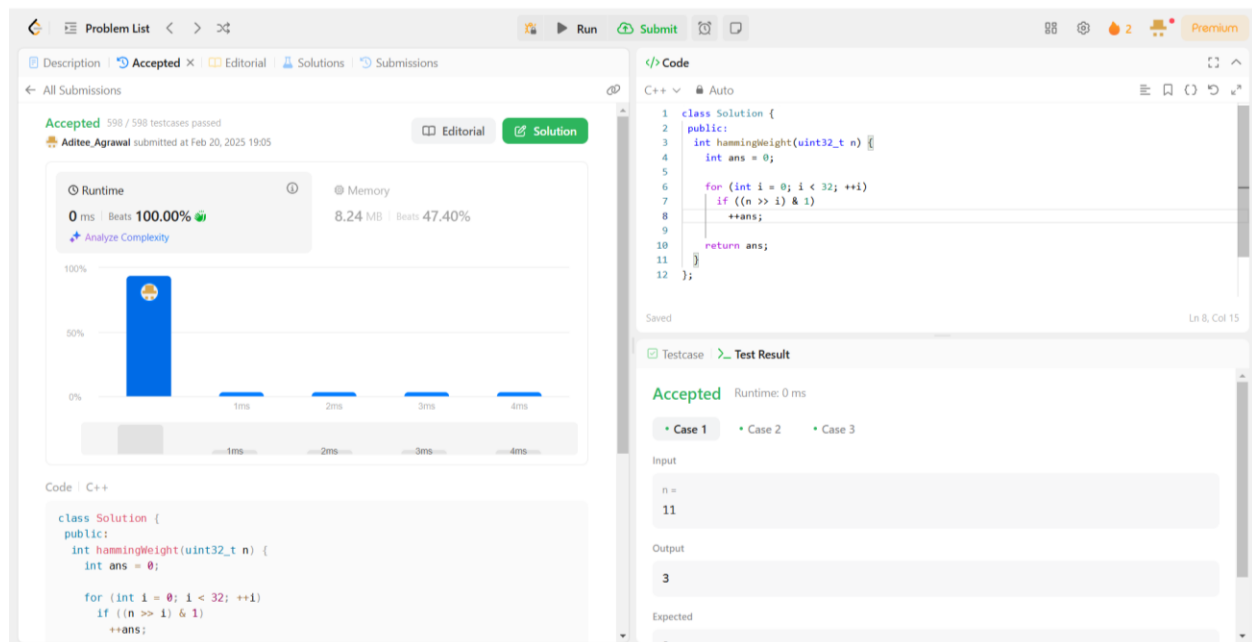
3 Number of 1 bit

```
cclass Solution {
 public:
  int hammingWeight(uint32_t n) {
    int ans = 0;

    for (int i = 0; i < 32; ++i)
      if ((n >> i) & 1)
        ++ans;

    return ans;
  }
};
```

4. maximum Subarray

```cpp
class Solution {
public:
 int maxSubArray(vector<int>& nums) {
   vector<int> dp(nums.size());
   dp[0] = nums[0];
   for (int i = 1; i < nums.size(); ++i)
     dp[i] = max(nums[i], dp[i - 1] + nums[i]);
   return ranges::max(dp);
 }
};
```
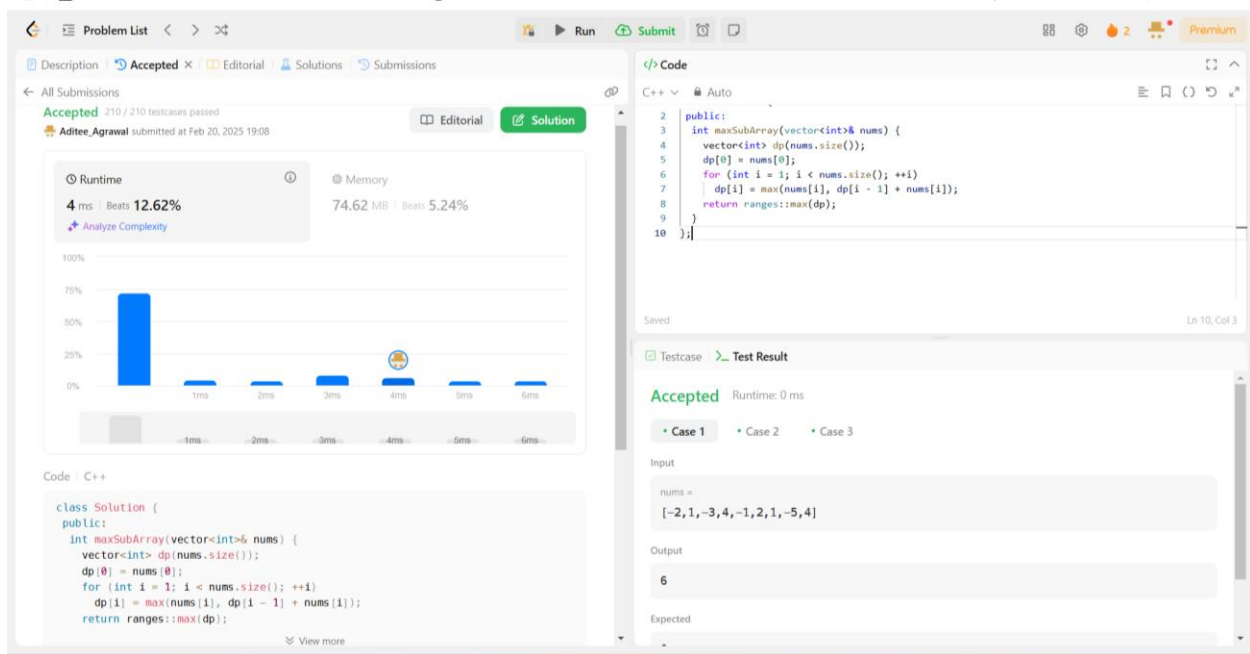
5. Search a 2D Matrix

```cpp
class Solution {
public:
 bool searchMatrix(vector<vector<int>>& matrix, int target) {
  if (matrix.empty())
    return false;
  const int m = matrix.size();
  const int n = matrix[0].size();
  int l = 0;
  int r = m * n;
  while (l < r) {
   const int mid = (l + r) / 2;
   const int i = mid / n;
   const int j = mid % n;
   if (matrix[i][j] == target)
     return true;
   if (matrix[i][j] < target)
     l = mid + 1;
   else
     r = mid;
  }
  return false;
 }
};
```

6. Super Pow

```cpp
class Solution {
public:
    int modPow(int a, int b, int mod) {
    int result = 1;
    a %= mod;
    while (b > 0) {
        if (b % 2 == 1) {
            result = (result * a) % mod;
        }
        a = (a * a) % mod;
        b /= 2;
    }
    return result;
    }
    int superPow(int a, vector<int>& b) {
    const int mod = 1337;
    int result = 1;
    for (int digit : b) {
        result = modPow(result, 10, mod) * modPow(a, digit, mod) % mod;
    }
    return result;
    }
};
```

Run Submit Premium

Description | Accepted × | Editorial | Solutions | Submissions

All Submissions

Accepted 57 / 57 testcases passed

Aditee_Agrawal submitted at Feb 20, 2025 19:14

Solution

Runtime
2 ms | Beats **35.77%**
Analyze Complexity

Memory
15.27 MB | Beats **52.85%**

75%
50%
25%
0%
2ms   4ms   6ms   8ms   10ms

2ms   4ms   6ms   8ms   10ms

Code | C++

```cpp
class Solution {
public:
    int superPow(int a, vector<int>& b) {
        int ans = 1;
        a %= kMod;
        for (const int i : b)
            ans = modPow(ans, 10) * modPow(a, i) % kMod;
        return ans;
```

Code

C++ ∨ Auto

```cpp
1  class Solution {
2  public:
3      int superPow(int a, vector<int>& b) {
4          int ans = 1;
5          a %= kMod;
6          for (const int i : b)
7              ans = modPow(ans, 10) * modPow(a, i) % kMod;
8          return ans;
9      }
10 private:
11     static constexpr int kMod = 1337;
12     long modPow(long x, long n) {
13         if (n == 0)
14             return 1;
15         if (n % 2 == 1)
16             return x * modPow(x % kMod, (n - 1)) % kMod;
17         return modPow(x * x % kMod, (n / 2)) % kMod;
18     }
19 };
```

Saved   Ln 7, Col 51

Testcase >_ Test Result

Accepted Runtime: 0 ms

• Case 1   • Case 2   • Case 3

Input

a =
2